

POTOMAC VALLEY RADIO CLUB

est. 1947

AUGUST 1994 NEWSLETTER

OFFICERS

PRESIDENT - K3NA ERIC SCACE (301) 293-2448
VICE PRESIDENT - KE3Q RICHARD BOYD (301) 464-8014
SECRETARY (MD) - KF3P TYLER STEWART (301) 953-3532
SECRETARY (VA) - K7SV LARRY SCHIMELPFENIG (703) 972-3308
TREASURER - ND3A ROBERT SHAPIRO (703) 204-2771
HISTORIAN - W3GN LAWRENCE FADNER (301) 725-1624

The Potomac Valley Radio Club meets the second Monday of each month, from September through May. Regular business meetings alternate between Virginia and Maryland. For directions to the next meeting, see below. Or call any club officer.

VRC CHARTER MEMBERS: W3GRF (SK), W3JKN, W4AAV (SK), W4KFC (SK), W4KFT, N0FFZ, W4LSE, W7YS, VP2VI (W0DX).

Charter Members are not required to pay dues.

VHF Repeater (K3WX): Output 147.00 MHz., Input 146.40 MHz.

UHF Repeater (K3WX): Output 443.15 MHz., Input 443.1 MHz.

Packet Cluster Contest/DX System:

145.51 MHz. Connect to W0YVA
145.57 MHz. Connect to KE3Q
145.59 MHz. Connect to W3LPL
145.63 MHz. Connect to K3NA
145.71 MHz. Connect to N4SR

Next Meeting:

ANNUAL PVRC/NCDXA FOWLFEET

Date: Saturday, August 27

Place: QTH of Marty Johnson/Susan Ritchie

W3YOZ/N3HIT

1062 Rodgers Road

Churchton, MD

Tel: (410) 867-1911

Time: 1300 Hours EDST

Check with the packet cluster or the repeater for last minute changes, if any.

DIRECTIONS to W3YOZ/N3HIT:

From Wilson Bridge: I-95/I-495 to MD Route 4 (Pennsylvania Ave. South/East); turn off at MD Route 258 (Bristol/Deale); take 258 to MD Route 256; turn left and go to Rodgers Road; turn right, go to gravel road on left; turn left; go to 1062 sign, turn right and go to picnic grounds at the water's edge.

From U.S. Route 50/Beltway: Take Beltway to Route 50; take Route 50 east; after crossing Patuxent River the next turnoff is MD Route 424 (Davidsen Mill Road); take 424 and continue until it dead ends at MD Route 2; turn right, go 200 feet and turn left on Mill Swamp Road; continue to MD Route 468 (Muddy Creek Road); turn right on 468 and to MD Route 256 (look for Smith's Building Supply); turn right on MD Route 256 and continue to Rodgers Road (first left after the Churchton Post Office); turn left on Rodgers Road, go to gravel road on left; turn left, go to 1062 sign, turn right and go to water's edge.

From I-97: Take I-97 South to MD Route 665 (Allen Blvd.); take 665 to MD Route 2; take Route 2 south to Mill Swamp Road (first left after Route 424 on right); take Mill Swamp Road to MD Route 468 and follow the directions above.

PVRC SELECTS A LOGO

by Ed Steeble, K3IXD

By almost a 2 to 1 margin, logo entry #3 was selected. That was the circular one with the MD, DC, VA map. While most members didn't send in any comments nor make suggestions, the reasons given for choosing the winning logo were:

1. It best shows the geographical area of the members,
2. The map in the center immediately relates the location of the club,
3. The name of the club is clearly shown,
4. The purpose of the club is stated,
5. There is no doubt on the age of the club,
6. It tells the whole story, who we are and where we are located! Oh Yeah! and the year it started! It is the only one that fully describes our club,
7. When reduced down in size logo #3 is the most legible (this commenter sent a copy of them at 17% and 23% reduction),
8. The only one worth considering, and
9. It is important for others to realize that PVRC is a contest club and that we are proud of our contest orientation.

The final tally was:

logo #1: 1 (PVRC in an oval)

logo #2: 3 (PVRC in a diamond)

logo #3: 26

logo #4: 5 (the Capitol with lightning bolts)

logo #5: 6 (the Capitol with PVRC spelled out in a semi-circle).

Since logo 1 and 2 were very similar and logo 4 and 5 were also similar I combined those votes to insure there was a clear winner. That tally was:

logo #1 + #2: 4

logo #3: 26

logo #4 + #5: 11

Along with the votes, I received many notes of thanks for running this contest. Several people also deserve recognition. They are:

1. K3NA, for constantly making comments at the meetings about wearing your PVRC badge which made me think about improving PVRC visibility (hamfests, on QSL cards, etc.)
2. WR3E, for initially suggesting the need for a logo,
3. KO4FM for doing the graphic art work.
4. WZ3Q for entry #1 and #2
5. (I submitted #3)
6. KE3Q for entry #4, and
7. WR3Z for entry #5.
8. Others who submitted entries were: N6CZG, W7YS, N4MM/WA3UTA (N4MM submitted the cover from the Silver Anniversary issue which was designed by WA3UTA.)

I am checking on having T-shirts printed with a small logo over the heart and big logo on the back. The shirt is a Hanes Beefy-T, 100% cotton, ash color. The logo is dark blue. I am also checking out prices on hats and lined and unlined coaches' jackets. The hats and jackets would be navy blue with the logo in white. I have also written for prices on QSLs and a rubber stamps logo. Watch the Packet Cluster and the *Newsletter* for more info. I would appreciate any leads on QSLs and rubber stamps.

Thanks to everyone for the encouragement and support.

MUSINGS OF THE EDITOR...

WANTED: A NEW EDITOR

You read it right! I have announced to the Board of Directors that, effective 1 January 1995, when the next Board of Directors takes over, I am resigning as editor of this publication.

It all started when the home copier broke down. Though we selected our Canon PC-6RE because it comes highly recommended by *Consumers' Report*, I have learned that home copiers are not built for the heavy duty required to run off 1500 impressions (150 copies x 10 pages) within 24 hours. It wears them out fast! Not only that but toner cartridges, when used this way, are expended at the rate of one every two months at approximately \$100 per cartridge. We had been charging every other toner replacement to PVRC though in fact more than 90% of the copier's use was connected with the *Newsletter*.

Therefore the copying/collating for the last issue was done at Kinko's for \$84. Given the fact that I realized that the *Newsletter* was eating up the greater part of the treasury, I was planning to simply pay this cost myself, but the keeper of the family books felt otherwise, so we agreed at that point, after considerable discussion, that following a suitable grace period which would allow the Club to come up with a new Editor, I would step down, and I announced this decision to K3NA, KE3Q and ND3A.

Rob had simultaneously been viewing the drawdown in the treasury's funds with some alarm, and we had a discussion about it, whereupon the Board was informed and, as a result, Rich has arranged to have the *Newsletter* run off at no expense to the Club. Incidentally, the postage expense for each issue is paid by the advertisers.

Meanwhile, however, I had decided that my decision to resign as Editor makes sense for other reasons and therefore I decided to stick with the original decision.

The main reason is that I think it is time the Club find an Editor who is more in tune with what the Board would like to see the Club do. Though no one on the Board has ever expressed anything but strong support and gratitude for my efforts, I have the feeling that an Editor who would do more to emphasize competition with the other contest clubs in the present without reminiscing so much about the glories of the past would be appreciated. An Editor who showed more acceptance of new developments like Internet would be more in tune with the current leadership. And an Editor who had participated in at least one NA QSO Party would probably be more up with the current contest scene. It goes without saying that I believe the next *Newsletter* Editor should above all have these attributes.

Since the Editor by default has come to be the keeper of the current membership list of the Club, I have long been bothered by the fact that some of the best and brightest of the current active contest operators whose scores could contribute to the Club efforts or who make up part of the club's multi-multi efforts, and who proudly tell others they are PVRC members, have not been current members for some time. This tells me that, as *Newsletter* Editor, I have failed miserably to generate enthusiasm for active participation in the Club's activities. Since this is the most important thing an Editor can do for his Club, it is time I stepped aside so that an Editor that fulfills this function can be found.

Apart from this, personal considerations, including the wish to be out from under a monthly deadline and prospects of ever-increasing overseas travel commitments for longer periods of time per trip, certainly weighed heavily in this decision.

As I was mulling all of this over in my mind, the thought also crossed my mind about the *Newsletter* of the future. Since the bulk of the work and expense is not in the writing but in

the reproduction and delivery of the product, which contest club will be the first to come up with the paperless club publication?

I predict it will go something like this: When a person becomes a member or renews his membership, he will be asked to provide his E-mail address, whether landline or amateur radio packet. If he doesn't have one, it will be understood that he will not get a copy of the club publication. I note, for example, that the Southern Maryland Amateur Radio Club (SMARC) already has its newsletter available for reading on the WA3TAI BBS.

Oh yes, now that I have turned all the would-be editors out there completely off, I should

mention that there are some perks that go with being Editor. You get to see all the publications of the other clubs that we exchange newsletters with first, before anybody else does. You get a free subscription to the *ARRL Letter*. And *ex officio* you are aware of everything that is happening in the Club. And finally, you have the opportunity to influence the membership toward your point of view on the contest issues of the day.

I will be Editor for a while yet, so this is not the time for expressions of thanks and gratitude to you, the club members and the *Newsletter* readers. That will come in the January issue, my last as Editor.

JUNE MEETING

REGULAR MEETING 18 JUNE 1994

The June meeting of the Potomac Valley Radio Club was held at the Bowie QTH of Rich and Amy Boyd, KE3Q/N3MIL. There was no business meeting as such. Since the National Capitol DX Association was unable at the last minute to meet at its planned site, the meeting became a *de facto* joint meeting of the two clubs.

There were plenty of chairs and refreshments, and WV3B provided a nice tent which gave us some shade in the 90+ weather.

Those who chose to walk around the premises were treated to the sight of lots and lots of tower sections, most of them lying horizontal on the ground, though a couple of towers adorned by various antennas are up. Looks like Rich has big plans for the future.

PVRC'ers signing the attendance roster included: KE3Q K3ZO W3ZZ KH2F W3LPL K7SV AD4FX WV3B WF3J ND3A WR3Z W3YOZ KO0U K8OQL W9LT KC3RN W3AZ W3AZD W3HVQ WB3ANE WB6VGI K3YDX N3CBJ N4QQ N2US (Visitor). Thanks to K7SV for taking attendance.

Among the topics of the informal discussions were the recent openings on 6 and 2 meters, and even 432 MHz. The VHF bands in early June had been as hot as the weather!

Others discussed recent storm antenna damage and plans for repairs during the summer.

The DX'ers in the crowd were either bragging about working Pratas Island and Scarborough Reef or heard to wish that the DX Advisory Committee would not count them for new countries. All agreed that Martti Laine is making a big splash with his new assignment in the Far East.

Another topic of discussion was the recent VHF contest. Some of the VHF contest traditionalists are aghast at the increasing usage of FM in the VHF contests, brought about because most of the "codeless techs" are only capable of working FM. This potentially rich harvest of QSO's has attracted the multitis to FM, and since only a few simplex channels are generally used in the contest, it has been a case at times of "he who gets there first owns the channel for the duration." VHF purists also condemn the fact that some of the purported "bad habits" of HF contesters are now beginning to "contaminate" VHF. Thanks to Rich and Amy for a FB event!

COMPARING DIGITAL AUDIO SIGNAL PROCESSORS

by Brian McGinness, WA3WJD

I posted a request for comments about DSP/noise reduction units on packet a couple weeks ago. I got about six responses, and some of them asked me to post the results.

Not too many responses so take this with a grain of salt:

Two stations were using the JPS NIR-10, one was using a W9GR homebrew unit, two were using the Timewave DSP-9+, and one was using the Radio Shack unit.

None of the units worked miracles, so don't expect ALL the noise to be gone. And the more aggressive they are about removing noise, the funnier the surviving audio is. Cranked up all the way, the audio might not be what you would want to listen to for long periods, but they certainly help make difficult copy better.

The JPS unit will not do noise reduction and tone removal at the same time. The Timewave and the Radio Shack (more on the RS later) will do both at the same time. I have the Timewave and although it will remove both tones and noise at the same time, the audio that is left at times sounds like someone talking underwater.

All the units functioned well as tone removers. The JPS and the Timewave also functioned well as noise removers. The Radio Shack unit claims 20 db. of noise reduction, but it does it through bandpass filtering and not through signal noise processing. That means the RS unit will remove noises outside of the normal audio passband, but really doesn't get it for most noise. See the July *QST* for more on the Radio Shack unit. They say they are changing their spec sheet to make that point clear.

However, the Radio Shack unit works great as a tone remover, and works great as a CW filter. It has a built-in speaker and a nice package, so one really can't complain for \$60 - just don't

expect it to remove noise. For a quiet home QTH to remove tones and assist with CW, it is a worthwhile purchase.

Comments received on the JPS NIR-10 say that it works great, but does not do noise reduction and tone removal at the same time. One or the other. No data filters on the NIR-10.

The Timewave DSP-9+ is \$100 less than the NIR-10. It will do both noise reduction and tone removal simultaneously with the limitations mentioned above. It has a 100 Hz & 200 Hz CW filter, as well as data filter modes for HF packet, AMTOR, PACTOR and RTTY. The DSP-59+ also adds G-TOR, SSTV EME and WEFAX filters although no one said they had one of those. Also the Timewave units have a programmable CW center frequency of 400, 500, 600 and 800 Hz if you don't like the "standard" 800 Hz center frequency. They also have SSB bandpass filters of 1.6, 2.0 and 2.4 KHz.

One thing that stands out is the more aggressive the units are about removing noise, the funnier the audio sounds. The Timewave has a jumper to make the unit more or less aggressive about removing noise.

I bought my unit for two reasons. First was to use it mobile, and try to combat some of the noise in the TS-50 receiver. Second, I got it to try to get some use out of 80 and 160 in the summer with 10 over 9 continuous static. It seems to work for both, and I was back working DX this weekend on 80 meters in spite of the lightning noise.

I may have missed some of the details, but it seems that the Timewave DSP-9+ offers the most for the money. The data and CW filters are excellent, the tone remover is excellent, and the noise reduction is as good as noise reduction can be (I think).

The remaining and unresolved problem is that

all these units hook to your speaker output. As a result, when your rig is receiving a strong carrier or strong noise (S9+) your rig's AGC will start throttling back the receiver gain, even though the box removes that signal. This has the net effect of desensitizing your receiver unnecessarily (see *Low Band DX'ing* by ON4UN page 3-9, section 1.8.11) so that you may not copy an S2 or S3 signal in the presence of a strong nearby signal in spite of the noise reduction unit. The units really need to be located in the IF before the AGC circuit, but this becomes a real problem with the different IF's on various rigs.

Hope someone finds this of interest, and if anyone has additional comments send them along to me.

(Addenda: As long as we are discussing noise eliminators, here is a brief writeup I did recently on the S.E.M. QRM Eliminator-Mark II, made on Britain's Isle of Man. Unlike the units Brian has discussed, this one is an RF-based unit which is connected in the antenna line ahead of the receiver. It functions somewhat like the old Collins noise blanker, in that two signal sources are combined, and what is common to both of them is eliminated, while what is only on the receive antenna is left untouched. The difference is that the S.E.M. unit, unlike the Collins, does not have a separate front end for the auxiliary noise source which functions on a different frequency outside the ham bands. The S.E.M. unit usually does all its processing on the frequency the operator is using, although the phasing controls can be adjusted to eliminate a strong signal present on another part of the band one is using - Fred, K3ZO)

Just as my friend Tony Waltham, HS0/G4UAV, had told me, it is VERY important that the signal level for the noise or signal you wish to eliminate be VERY strong on the AUXILIARY ANTENNA. Once this condition is met, the QRM Eliminator works very well indeed.

In my case, I have used it mainly on 20 meters, where I designate my 4-el quad at 78 feet as the "Main Antenna" for the QRM Eliminator's purposes, while for the "Auxiliary Antenna" I use my 6-el monoband Telrex yagi at 150 feet.

This works very well because since my noises originate at some distance from the QTH, the higher Yagi receives them very strongly. For a single noise source I have found that the QRM Eliminator will take a noise with strength as high as 20 db. over S9 and eliminate it practically altogether. But when there are multiple noise sources, the best you can do is to get a 20 db. over S9 noise level down to around an S6, where a residual "white noise" allows you to go no further.

The psychological effect of having the QRM Eliminator in the circuit is what really pays off. Even though I can read most signals without the QRM Eliminator switched on, it provides so much more peace of mind when tuning the band without having a frying noise constantly jangling one's nerves.

The QRM Eliminator does not reduce the strength of signals which have bounced off the ionosphere, since there is an instantaneous phase difference between the signal as it arrives at one antenna compared with its arrival at the other antenna. However, the QRM Eliminator works well on close-in local "ground wave" signals. One of the closer-in stations to me who is a regular on 20-meter CW is Sterling, WA3GOS. It was impressive to say the least one day when, upon my tweaking the phasing controls, Sterling dropped off about 30 db. while everyone else near the frequency stayed the same strength. Incidentally, the settings at which the phasing controls provide the maximum elimination for a nearby signal are different than for the point they provide maximum elimination for a power line noise, so the QRM Eliminator can be used to lower noise which bothers weak ground-wave signals as well.

The QRM Eliminator is ideal for eliminating front-end overload for signals from neighboring hams. However, it cannot simultaneously eliminate the broadband phase noise generated by the newer synthesized rigs as this noise is broadband while the QRM Eliminator works on a discrete frequency. In other words, you can either eliminate the front-end overloading on the whole band, or the phase noise on the frequency you are listening on at the moment,

but not both at the same time.

In my particular case, the QRM Eliminator, whose front end is broadbanded, has been bothered by Radio Station WPGC on 1580 KHz, whose 50-kW transmitter is some five miles from my shack as the crow flies. WPGC would crop up in odd birdies on the various ham bands with the QRM Eliminator switched on. However, my Chief Engineer Jirasak, N6CZG, built a standard trap for 1580 KHz,

inserted ahead of the QRM Eliminator, which has eliminated the problem.

I hope this analysis might be useful to members who might be considering obtaining this fine Isle of Man product. Of course almost from the time I got it working, there began a very humid summer which has quieted all of my line noises almost around the clock. However, the QRM Eliminator remains prepared to come to the rescue when it is again needed.

OVER-THE-HILL DIVISION

15 JUNE 1994

The Over-the-Hill Division of the Potomac Valley Radio Club met for lunch at the Ramada Inn, Oxon Hill, MD, on a scorching day, with Bill Leavitt, W3AZ, as host. Thankfully the Ramada's air conditioning was working fine.

Those attending included: W6AXX W3AZ AA4XU W4DM W3XE W3CPB K3ZO AA4I K3WX W3GN KC3AG K2LEQ.

Among the topics discussed was W3GN's renovated antenna farm (complete with pictures); recent six meter openings to liven otherwise humdrum band conditions; W3XE's recent tumble on the kitchen floor (he looks none the worse for wear); the PVRC logo contest; and ham radio legal matters.

A good time was had by all.

20 JULY 1994

The Over-the-Hill Division of the Potomac Valley Radio Club met for lunch at the Holiday Inn, Beltsville, MD, with Andy Andersen, W3XE, as host. This is a new location for the group and those in attendance were impressed with the fare.

Those attending were: W3XE KC3AG W3EDZ K3ZO AA4XU WB3AVN W3AZ W3GN W3TMZ K3WX W3CPB and K6IR.

K3WX had visited charter member W0DX/VP2VI in his Virgin Islands lair and brought back pictures and maps to prove it. W3AZ dug up an old BV1USA QSL signed by operator W3EIV who turns out to be none other than present-day KC3AG!

A good time was had by all.

NOTES ABOUT FUTURE MEETINGS

After the Fowlfest, PVRC begins its regular fall schedule of meetings, beginning with the traditional gathering of the clan at the FARFEST in Gaithersburg on Sunday, September 11. Look for the PVRC sign in the main pavillion.

Then on Monday, September 19 there will be the first regular business meeting of the season. The Church of the Nativity in Temple Hills has been requested for this meeting. Confirmation is still pending.

The October meeting will take place on the regularly scheduled date, Monday, October 10. Rob, ND3A, is checking out other Northern Virginia sites which wouldn't shoo us out quite so early, but if that avenue produces no results, the meeting will take place at the usual place, the Tysons-Pimmit Library at Tysons Corner.

There will be no October *Newsletter* as your Editor will be out of town, so watch the packet cluster or repeater for late details.

NEWS ABOUT MEMBERS

It is always a matter of some sadness when news is received of a member's passing. This was the case recently with W2GHK, W6MUR and W9KBE.

Stu Meyer, W2GHK, died in May, but a reader has suggested that a more complete bio be written here since obituaries in other publications were not very extensive. When Stu first arrived in the Washington area in the 60's, he immediately joined PVRC. Later, when NCDXA was formed, Stu, whose primary operating interest was DX'ing rather more than contesting -- though he could always be found in the 160 Meter CW contests each year -- spent most of his time with that organization rather than with PVRC. But most of us still saw a lot of him.

Before Stu arrived in Washington he had already had a stellar career in the business world, at one point being Chief Engineer and later CEO of Hammarlund, makers of the HQ-129-X and SP-600 receivers among others. (Eat your hearts out, you OT's). Later he went on to found Ameco, maker of preamps and other receiver accessories.

While still with Hammarlund, Stu initiated the Hammarlund "DX'pedition of the Month" which basically provided QSL services for a large number of overseas operations to rare and semi-rare countries over the years. Stu put together a stable of QSL'ers who handled cards for many, many operations, allowing the operators to spend full time making QSO's instead of worrying about the QSL'ing aspects.

Once here in the Washington area, even while earning his paycheck from EIA and later as a Washington representative of E. F. Johnson and other electronics firms, Stu became the quintessential organizer/MC of countless Washington ham radio social events, including the annual Old Timers' Dinner and the annual AFCEA ham radio luncheon. He was as far as I can recall the founder of DXPO and continued to be its organizer for many years. He was the chief organizer of the ARRL National

Convention in Reston in 1974. He was also a long-time member of the Radio Club of America, the Cadillac of ham radio clubs, and was a leader of QCWA, serving as its President and in other offices through the years. Who will soon forget the way he always introduced himself as "W2GHK Forever" at all these social functions? Others could change their calls if they wanted to, but Stu wasn't going to have any of it! Few hams that I have known gave so much of their time and efforts to amateur radio as Stu. RIP, Stu Meyer.

Just recently we received word that Rodney "Bill" Johnson, W6MUR, passed away in California. Bill was a contester and in recent years a DX'er who had a standout signal through the years. He was a regular participant in the PVRC Reunion right up to the end. Those who knew him well, such as Larry Fadner, W3GN, will miss their good friend.

Word was received from the widow of Dr. Erling R. Jacobsen, W9KBE, that her husband died recently after a long and painful illness. He was a local member of PVRC in the 50's, and was employed in intelligence work for the Government during the bulk of his work career.

Going on to happier news, Gene, W3ZZ and Ken, KH2F, recently organized a VHF picnic to discuss a number of current VHF issues. A number of PVRC'ers attended, including Frank, W3LPL; Jack, W3TMZ; Tyler, KF3P; Dick, K3MQH; Fred, K3ZO; Glenn, KC3EK; Ed, KJ4VG; Cliff, KO4FM; Jack, WB4NFS; Rich, KE3Q; and Steve, KO0U.

Bill, N3RR, is busy putting up a new tower and has enlisted the assistance of a number of members to help him. Eventually Bill will provide a new home for what has been the W0YVA packet cluster node, which is going out of business.

Frank, W3LPL and Ken, KH2F, journeyed to Grid Square FM-27 for the Perseids Meteor Shower. Ken, KE9A, put 8P9GY on the air in the IARU World Championship contest.

MARYLAND RADIO CENTER

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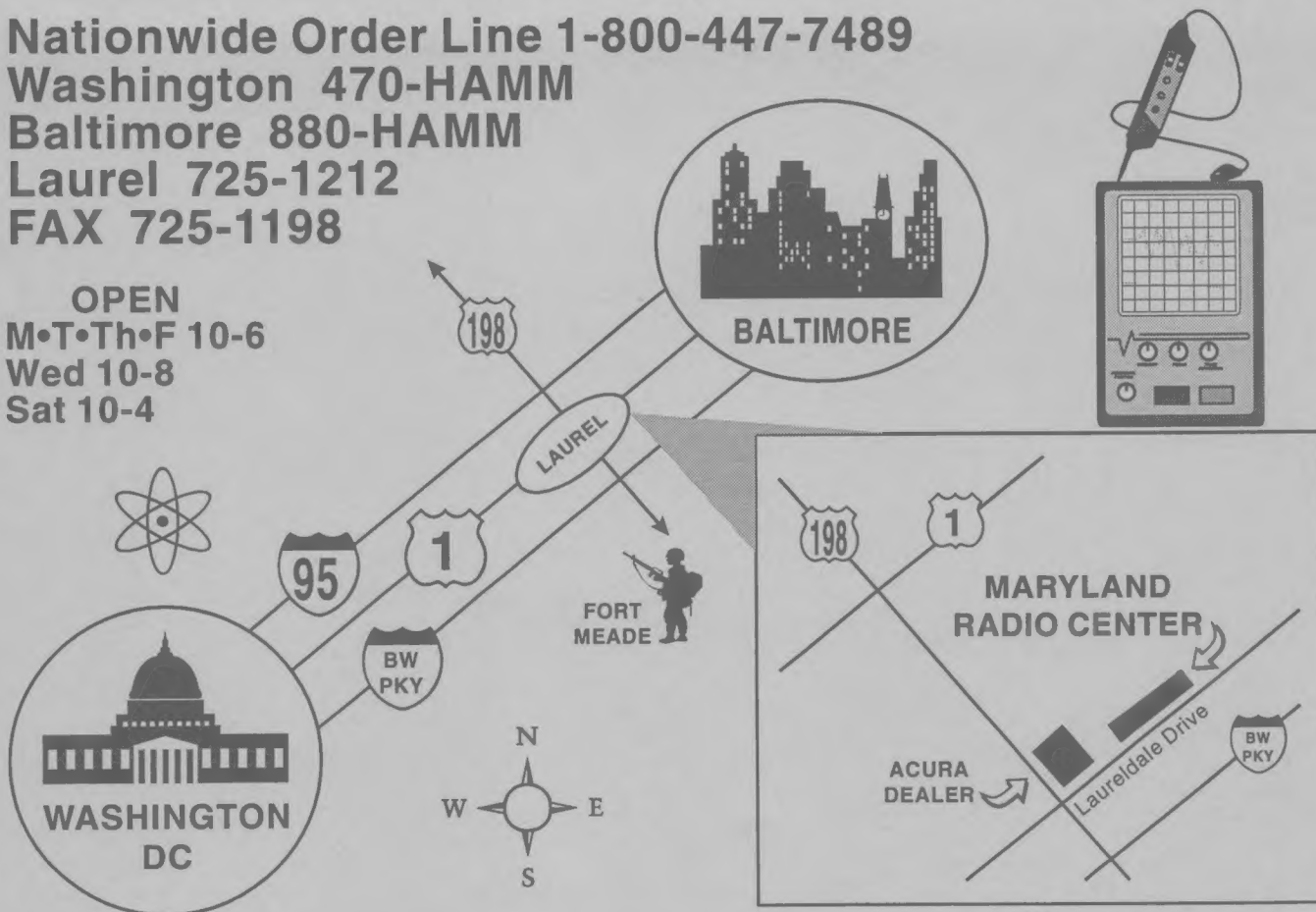
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FIRST CLASS

PVRC NEWSLETTER